

2010 Annual Drinking Water Quality Report For Calendar Year 2009 Operations Turkey Hill Water Company, Inc. (PWSID 0080048), La Plata, MD

We're pleased to present this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of our community's water and routinely monitor for any contaminants according to Federal and State laws.

This report is a snapshot of last year's (CY2009) water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We issue this report annually in accordance with the provisions of the 1996 amendments to the Safe Water Drinking Act (40 CRF §141.155). All water companies are required to issue this report (which is, under the statutes, is called the "Consumer Confidence Report" or CCR). We will issue our next CCR (covering CY 2010 testing and operations) by the end of June 2011.

As always, all are invited to attend both our annual water company shareholders meeting (held yearly, sometime around Labor Day) and our Board of Directors (BOD) meetings, which are held several times a year on a somewhat irregular basis.

You are one of the forty-seven shareholders/owners of our water company and we need/appreciate your support and feedback. We want to address any of your questions or comments on either our water quality or the operational/fiscal details of our customer-owned water company. Please don't hesitate to contact us.

The Source of Our Water

Our drinking water comes from deep underground aquifers. This is called "ground water" (as opposed to "surface water" which comes from rivers and lakes). Our well (new in 1994) is 988 feet deep and draws water from aquifers that are between 585 and 840 feet below the surface. According to US Geological Survey mapping of our well, the level has slowly been dropping over recent years with the growth of the county and higher demand for ground water. An aquifer is a type of underground reservoir or deposit of water, which is tapped by drilling wells and pumping the water to the surface for distribution. The layers of earth between sources of contamination at the surface and the deep aquifer helps to purify the water before it actually reaches the aquifer, making it easier for us to treat it before we pump it into our water distribution system. The aquifers from which we draw our water are part of the Atlantic Coastal Plain physiographic province. Specifically, our water is from the Patapsco Formation, which is a confined aquifer and, as determined by Maryland's Source Water Assessment Program, "not susceptible to contaminants originating at the land surface..." although it is susceptible to some naturally occurring contaminants. We routinely test for all contaminants monitored or regulated by law.

Do I need to take any special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium¹ and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

¹ Cryptosporidium is generally associated with surface water (from rivers or surface reservoirs) – not with ground (well) water such as we use. Because of this, we are not required to monitor for cryptosporidium. We do test for coliform on a monthly basis which is a good indicator of whether any biological surface contaminants are reaching our water supply (to date, based on monitoring, they aren't). The above paragraph on "Special Precautions," along with several other sections in this report, are mandated "required language" which must be included in every water quality report nationally and should be considered in that light.

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791) or searching the EPA or other appropriate websites.

Definitions, Terms and Abbreviations

In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

- **Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present.
- **Parts per million (ppm) or Milligrams per liter (mg/L)** - one part per million corresponds to one minute in two years or a single penny in \$10,000. 1 ppm = 1 mg/L
- **Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000. **MNR** - Monitoring not required, but recommended. Regulatory limits have not been established for the contaminant.
- **NA** - Not applicable. Often means contaminant is not regulated under law as a primary (i.e., related to health or safety) contaminant or a standard hasn't been yet established.
- **ND** - Not detected. The level of a contaminant is below the detection level of the instrumentation used to measure for it.
- **Picocuries per liter (pCi/L)** - a measure of radioactivity.
- **Action Level (AL)** - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT)** - a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Maximum Contaminant Level Goal (MCLG)** - the "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Maximum Contaminant Level (MCL)** - the "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Water Quality Data

The table below lists all of the drinking water contaminants that we tested for and were detected during calendar year 2009. There were many tests performed this past year - for biological contaminants, nitrates, volatile organic contaminants (VOCs - see <http://www.epa.gov/ogwdw000/hfacts.html#Volatile> for a complete list), lead and copper (per the Lead and Copper Rule), and disinfectant contaminants. All results were below the detection limit (essentially zero) except as reported below. We have only reported herein on those contaminants which were actually found (analytically detected) in your water. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. We have also shown how our results compare to state and federal standards (MCLs and NCLGs). All of our test results were within safety standards (no violations).

Lead and Copper in the Distribution System (Lead and Copper Rule):

| Contaminants | Date Tested | Highest Level Allowed MCL (mg/L) | Ideal Goal MCLG (mg/L) | Your Water Amount Detected (mg/L) | Violation (i.e., exceeds allowable limits) | Potential Health Risk from exposure above the MCL | Typical Source |
|--------------------------------------|-------------|----------------------------------|------------------------|---|--|--|--|
| Copper (90 th percentile) | 31 Dec 09 | Action Level is 1.3 | NA | 0.26 (90 th Percentile Value) | No | Copper is an essential nutrient, but levels above the Action Level (for short periods) can cause gastrointestinal disturbance. Long term use above Action Level could cause liver/kidney damage. | Corrosion of copper plumbing. Copper mining and smelting operations and municipal incineration may also be sources of contamination. |
| Lead (90 th percentile) | 31 Dec 09 | Action Level is 0.015 | NA | Not Detected (<0.005) | No | Lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. | Lead in pipes or soldered connections dissolves in water |

Disinfection Byproducts/Residuals (sampled at source):

| Contaminants | Date Tested | Ideal Goal MCLG (mg/L) | Highest Level Allowed MCL (mg/L) | Your Water Amount Detected (mg/L) | Violation (i.e., exceeds allowable limits) | Typical Source | Potential Health Risk from exposure above the MCL |
|----------------------------|-------------|------------------------|----------------------------------|-----------------------------------|--|--|--|
| TTHM Total Trihalomethanes | 25 June 09 | N/A | 0.080 | 0.00141 | No | Byproduct of drinking water disinfection | Drinking water containing trihalomethanes in excess of the MCL over many years may result in liver, kidney, or central nervous system problems, or increased risk of cancer. |
| HAA5 Haloacetic Acids | 25 June 09 | N/A | 0.060 | 0.00155 | No | Byproduct of drinking water disinfection | Drinking water containing haloacetic acids in excess of the MCL over many years may increase your risk of cancer. |
| Chloroform | 8 Oct 09 | N/A | 0.070 | 0.0006 | No | Byproduct of drinking water disinfection | Chloroform exposure at higher levels may increase your risk of cancer. |

Please read the new required EPA statement on lead in drinking water:

“If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Turkey Hill Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.”

A Note about Sodium in Our Drinking Water

Based on our testing in previous years (most recently in 2007), we know that our water is naturally high in sodium (around 120 mg/l - remember that a liter (l) is just over a quart). The presence of sodium in our water is likely attributable to either (or both) the characteristics of our aquifer, or our proximity to the Chesapeake Bay and Atlantic coast (where salt water can be drawn into heavily used aquifers). **Sodium is a contaminant which is not subject to any proposed or promulgated national primary drinking regulation by EPA but is tested so those who are restricting sodium from their diets for medical reasons will know the level of sodium in our water.**

To put our sodium levels into perspective, a person drinking about a half gallon of our tap water per day (or consuming food made with our water) could add about 250 mg of sodium to his/her daily intake. Although FDA reports that most American adults tend to consume between 4,000 and 6,000 mg of sodium/day, the FDA recommends that all Americans limit their intake of sodium to no more than 2400 mg/day. If you check the nutritional label on your food, you will see that nearly everything contains sodium (e.g., 8 oz of skim milk has 130 mg of sodium, most regular canned soups or baked beans have 700 - 1000 mg of sodium per serving, Honey Nut Cheerios has 270 mg sodium per serving, etc.). Sodium is an essential nutrient, but we have no trouble getting all that we really need (i.e., at least 500mg/day per the current research) by just eating a regular diet with no added salt. Additional information on sodium can be found at <http://www.epa.gov/safewater/contaminants/unregulated/sodium.html>. If you have concerns about sodium, please discuss them with your health care professional.

Upcoming Monitoring/Testing

During 2010, we (or the State) will perform the following tests on our water:

- Nitrate (tested every year)
- Bacteriological contaminants/coliform (tested monthly)
- Lead and Copper Rule testing (Summer, 2010)
- Arsenic
- Fluoride
- Metals (Phase II/V)

The Folks Who Keep the Water Flowing

Our two certified water system operators are Warren Ricks (301-934-1466) and Frank Valenta (301-934-8814). Please feel free to contact them (or any of the Board Members) if you have any questions.